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(54) **WHIPPING DEVICE AND MACHINE FOR PRODUCING AND STORING ICE CREAMS AND SIMILAR PRODUCTS COMPRISING SAID WHIPPING DEVICE**

(57) A whipping device (6) for the production of ice creams and similar products is described, said device comprising a container (7) cooled by outer cooling means (19), a stirrer (11) arranged inside said container (7) and provided with at least one scraping blade (18) acting on at least one cooled wall (9) of said container (7). Said device is characterized in that it further comprises an

insert (20) arranged, during use, inside said container (7) in contact with said at least cooled wall (9) so as to prevent the formation of ice due to the condensation of vapour on said at least one cooled wall (9). A machine (1) for the production of ice creams and similar products, comprising at least one whipping device (6) of the aforementioned type, is also described.

EP 3 682 743 A3



EUROPEAN SEARCH REPORT

Application Number
EP 20 15 1032

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2010/175390 A1 (JEJCIC VALTER [SI]) 15 July 2010 (2010-07-15)	1-5	INV. A23G9/08 A23G9/12 A23G9/22
Y	* paragraph [0016] - paragraph [0034]; figures 1, 2 *	1,3,4	
Y	EP 3 338 560 A1 (CARPIGIANI GROUP ALI SPA [IT]) 27 June 2018 (2018-06-27) * paragraph [0013] - paragraph [0053]; figures 1-6 *	1,3,4	
Y	EP 3 036 998 A1 (SOFFIENTINI PAOLO [IT]; CIPELLETTI EMANUELA [IT]) 29 June 2016 (2016-06-29) * the whole document *	1,3,4	
A	US 2015/208829 A1 (HALPRIN STEVEN B [US]) 30 July 2015 (2015-07-30) * paragraphs [0003], [0004] * * paragraph [0051] - paragraph [00654]; figures 13, 14, 16, 18, 21, 22 *	1-5	TECHNICAL FIELDS SEARCHED (IPC)
			A23G
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 30 April 2020	Examiner Fiorenza, Francesca
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03.02 (P04C01)



Application Number

EP 20 15 1032

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-5

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



LACK OF UNITY OF INVENTION
SHEET B

Application Number

EP 20 15 1032

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-5

Whipping device (6) for the production of ice creams and similar products comprising a container (7) cooled by outer cooling means (19), a stirrer (11) arranged inside said container (7) and provided with at least one scraping blade (14, 18) acting on at least one cooled wall (9) of said container (7), characterized in that it further comprises an insert (20) having an annular skirt (21) arranged, in use, in said container (7) in contact with or close to said at least one cooled wall (9).

2. claims: 6-9

Machine (1) for producing and maintaining ice creams and similar products comprising a frame (2) provided with a plane element (4) whereon at least one opening (5) is formed;

- at least one whipping device (6) arranged with the respective container (7) in said at least one opening (5);
- a lid (15), for example dome-shaped, associated with each whipping device (6) which is movable between a position of complete opening away from said whipping device (6) and a position of complete closure on said whipping device (6).

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 20 15 1032

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2010175390 A1	15-07-2010	DE 102010000039 A1	26-08-2010
		IT 1394938 B1	27-07-2012
		SI 23257 A	29-07-2011
		US 2010175390 A1	15-07-2010
EP 3338560 A1	27-06-2018	CN 108236038 A	03-07-2018
		EP 3338560 A1	27-06-2018
		JP 2018118031 A	02-08-2018
		SI 3338560 T1	31-03-2020
		US 2018177210 A1	28-06-2018
EP 3036998 A1	29-06-2016	BR 102015032114 A2	28-06-2016
		CN 105707400 A	29-06-2016
		EP 3036998 A1	29-06-2016
		ES 2679106 T3	22-08-2018
		PL 3036998 T3	28-09-2018
		PT 3036998 T	11-06-2018
		SI 3036998 T1	31-07-2018
		TR 201808132 T4	23-07-2018
		US 2016174594 A1	23-06-2016
US 2015208829 A1	30-07-2015	CA 2853838 A1	13-06-2013
		CN 103917138 A	09-07-2014
		EP 2787864 A1	15-10-2014
		US 2015208829 A1	30-07-2015
		WO 2013086253 A1	13-06-2013